

# PATENT ABSTRACTS OF JAPAN

(11)Publication number :

10-256748

(43)Date of publication of application : 25.09.1998

(51)Int.Cl.

H05K 5/03  
G11B 33/02

(21)Application number : 09-057568

(71)Applicant : SONY CORP

(22)Date of filing : 12.03.1997

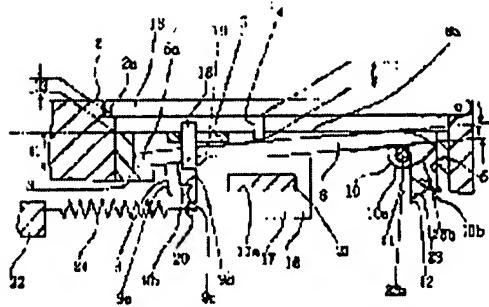
(72)Inventor : SHIMIZU KUNIO

## (54) DOUBLE-COVER STRUCTURE

### (57)Abstract:

PROBLEM TO BE SOLVED: To obtain a double cover in which inner and outer covers can be closed together by forming a pressing part on the outer cover and a part to be pressed upon the closure of the outer cover on the inner cover.

SOLUTION: An outer cover 13 is mounted, at the front edge part thereof, horizontally on the receiving part 2a of an outer shell 2 and an outer surface 8a of an inner cover 8 is pressed from above by a press protrusion 14, formed on the outer cover 13. Spring force of a torsional coil spring 12 is set lower than the pressing force being applied gravitationally from the outer cover 13 to the inner cover 8. Since the press protrusion 14 on the outer cover 13 presses the outer surface 8a of an inner cover 8 upon the closure of the outer cover 13, the inner and outer covers 8, 13 can be closed simultaneously. Consequently, annoying work for closing the outer cover 13 after closing the inner cover 8 is not required, and labor can be saved.



## LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of

rejection)

[Date of requesting appeal against examiner's  
decision of rejection]

[Date of extinction of right]

## [Claim(s)]

[Claim 1] Duplex lid structure characterized by being the duplex lid structure equipped with the outside lid which opens and closes an outline case, and the inside lid which open and close the crevice of the internal case arranged inside an outline case, having formed the press section in the above-mentioned outside lid, and forming the suppressed area pressed by the press section of this outside lid when an outside lid is blockaded by the above-mentioned inside lid.

[Claim 2] Duplex lid structure according to claim 1 characterized by for the press section of the above-mentioned outside lid being the inner surface of the press projection prepared in the inner surface of an outside lid, or an outside lid, and being the pressed projection to which the suppressed area of the above-mentioned inside lid was prepared in the outside surface of an inside lid, or the outside surface of an inside lid.

[Claim 3] Duplex lid structure according to claim 1 characterized by the lock out location of an inside lid when an inside lid is blockaded by press of an outside lid with this outside lid being a location which visited the inner base of the above-mentioned crevice rather than the lock out location of an inside lid when an outside lid is not blockaded but only an inside lid is blockaded.

[Claim 4] Duplex lid structure according to claim 2 characterized by the lock out location of an inside lid when an inside lid is blockaded by press of an outside lid with this outside lid being a location which visited the inner base of the above-mentioned crevice rather than the lock out location of an inside lid when an outside lid is not blockaded but only an inside lid is blockaded.

[Claim 5] Duplex lid structure according to claim 1 characterized by applying to the playback and/or the recording device which can perform the playback and/or record over the above-mentioned record medium only when the applied part equipped with a record medium is prepared in the above-mentioned crevice and the above-mentioned inside lid is blockaded.

[Claim 6] Duplex lid structure according to claim 2 characterized by applying to the playback and/or the recording device which can perform the playback and/or record over the above-mentioned record medium only when the applied part equipped with a record medium is prepared in the above-mentioned crevice and the above-mentioned inside lid is blockaded.

[Claim 7] Duplex lid structure according to claim 3 characterized by applying to the playback and/or the recording device which can perform the playback and/or record over the above-mentioned record medium only when the applied part equipped with a record medium is prepared in the above-mentioned crevice and the above-mentioned inside lid is blockaded.

[Claim 8] Duplex lid structure according to claim 4 characterized by applying to the playback and/or the recording device which can perform the playback and/or record over the above-mentioned record medium only when the applied part equipped with a record medium is prepared in the above-mentioned crevice and the above-mentioned inside lid is blockaded.

---

[Translation done.]

## DETÀILED DESCRIPTION

---

### [Detailed Description of the Invention]

[0001]

[Field of the Invention] This invention relates to duplex lid structure. In detail, it is related with the technique which enables it to blockade an outside lid and an inside lid at once.

[0002]

[Description of the Prior Art] For example, there are the playback and/or the recording device with which the body section (internal case) of which the playback section, the loudspeaker section, etc. for performing playback concerning record media, such as an optical disk, are formed in one, and consist is called the so-called sound system arranged in an outline case.

[0003] If it is in such playback and/or a recording device, it has the inside lid for generally opening and closing the crevice which has the applied part equipped with the record medium which it was formed in the outside lid and internal case for opening and closing an outline case, and was described above inside.

[0004]

[Problem(s) to be Solved by the Invention] By the way, the outside lid could be opened at the time of disconnection of an inside lid and closed no longer, although an outside lid can be opened and closed at the time of lock out of an inside lid if it is in the conventional playback and/or a recording device equipped with an outside lid which was described above, and the inside lid.

[0005] If this blockades an outside lid where an inside lid is opened and playback and/or a recording device are left in the condition when it enables it to open and close an outside lid irrespective of closing motion of an inside lid. It is for the dust and dust which were floating in the clearance between an internal case and an outside lid entering in a crevice, adhering to an applied part, causing trouble to the playback and/or record over a record medium, and avoiding this etc.

[0006] Therefore, in the conventional playback and/or a recording device, after closing an inside lid, an outside lid must be closed, the troublesome activity of it being very inconvenient and closing a lid twice must be done, and there is always a problem of taking time and effort.

[0007] Then, this invention duplex lid structure conquers the above-mentioned trouble, and makes it a technical problem to enable it to blockade an outside lid and an inside lid at once.

[0008]

[Means for Solving the Problem] In order that this invention duplex lid structure may solve the above-mentioned technical problem, the press section is formed in an outside lid, and when an outside lid is blockaded by the inside lid, the suppressed area pressed by the press section of this outside lid is formed.

[0009] Therefore, if it is in this invention duplex lid structure, when an outside lid is blockaded, an inside lid is also blockaded simultaneously.

[0010]

[Embodiment of the Invention] Below, it explains according to an example of operation illustrating the gestalt of operation of this invention duplex lid structure.

[0011] In addition, the example shown below applies this invention duplex lid structure to the playback and/or the recording device which are the so-called sound system which has for example, a compact disk (CD) player.

[0012] Moreover, when a direction is shown in this description, it explains by making into the bottom the direction which goes caudad the direction which goes to the lower left in drawing 1. direction to upper right direction a front to upper left direction the back to the left and lower right direction to the right and the upper part a top.

[0013] Playback and/or a recording device 1 are equipped with the body section which the playback section, the loudspeaker section, etc. for performing the box-like outline case 2 which carried out opening and the internal case 3 arranged to the interior, i.e., the playback concerning an optical disk (compact disk), are formed in the upper part in one, and changes (refer to drawing 1 ).

[0014] Level difference section 2a is formed in the opening edge by the side of before the outline case 2, and when the outside lid mentioned later is closed, let this level difference section 2a be the receiving part which receives the front end edge.

[0015] It is for applying to the method of the right from the center section on the top face of the internal case 3, and two or more actuation tabs 4 and 4 and ... being arranged, and performing various kinds of adjustments, such as these actuation tabs 4 and 4, the playback which ... requires for an optical disk and its halt or volume control, and tone control, etc.

[0016] The crevice 5 which carries out opening is formed in the upper part at the part on the left-hand side of the top face of the internal case 3, and the applied part which is equipped with an optical disk and which is not illustrated is prepared in the interior of this crevice 5. And level difference section 5a is formed in the opening edge by the side of

before a crevice 5.

[0017] And the tab insertion hole 6 of the shape of a long rectangle is formed in the cross direction located near the front end section of the opening edge on the right-hand side of a crevice 5 at the internal case 3. Moreover, the long insertion hole 7 is formed in the cross direction at the right side edge section of the top face of the internal case 3.

[0018] The inside lid 8 succeeds in tabular [ of an abbreviation rectangle ], the thickness T is made thinner than the distance H1 between the top face of the internal case 3 shown in drawing 3 , and level difference section 5a, and the end section is supported by the upper bed section free [ rotation ] in the back end section of the right-and-left both-sides wall of the above-mentioned crevice 5. And the stop pawl 9 is installed in the right edge in the location of the other end approach of the inner surface of the inside lid 8 (refer to drawing 2 ).

[0019] Stop section 9b which projected in the up Norikazu edge side of the inside lid 8 from the point of this, lobe 9a which projected perpendicularly, and this lobe 9a is formed in one from the inner surface of the inside lid 8, and the stop pawl 9 changes. And stop section 9b is equipped with 9d of stop sides parallel to the inner surface of the inside lid 8 succeeding circular face 9c and this circular face 9c approaching the inner surface of the inside lid 8 as it goes at a head.

[0020] The tabular support sections 10 and 10 are installed from the end section of the right-and-left edges on both sides of the inner surface of the inside lid 8 (only one thing is shown in drawing 2 ). The first portion of the field the thing 10 located in right-hand side among these support sections 10 and 10 turns [ field ] to the thickness direction and the direction which intersects perpendicularly is set to circular face 10a. It is formed as a contact side displaced upwards as it goes back in the condition, i.e., a level condition, that field 10b of the section succeeded in the shape of an approximate plane the second half in which this circular face 10a is followed, and the inside lid 8 was blockaded.

[0021] The support sections 10 and 10 are supported free [ rotation ] in the location of the ends approach of the rotation shaft 11 with which both ends were fixed to the side attachment wall of a crevice 5. The right-hand side support section 10 immediately and inside It twists, and a coil spring 12 sees by drawing 3 thru/or drawing 9 on the inside lid 8 with the torsion coil spring 12 by being inserted between the inner surfaces of the inside lid 8 and the stopper sections mentioned later in which the coil section was supported by the rotation shaft 11 in the shape of outer fitting, and the rotation force to the direction of a clockwise rotation is energized.

[0022] The outside lid 13 succeeds in tabular [ of \*\*\*\*\* of a long rectangle ] to a longitudinal direction, the end section in the cross direction is supported by the upper bed section free [ rotation ] in the back end section of the outline case 2, and the press projection 14 is installed from the center of abbreviation of the left half part of an inner surface (refer to drawing 2 ). and the distance H2 between receiving part 2a of the outline case 2 and the top faces of the internal case 3 which show die-length L of the shaft orientations of the press projection 14 to drawing 3 -- \*\* -- it lengthens and the point is formed in the shape of an abbreviation semi-sphere.

[0023] The end section of a bearing bar 15 is supported by the right side edge of the outside lid 13 free [ rotation ]. And a bearing bar 15 is inserted in in the above-mentioned insertion hole 7 formed in the right side edge section of the internal case 3, and the other end is supported free [ migration ] inside the internal case 3.

[0024] A principal piece 17, the tab section 18, the engagement section 19, and the spring-peg section 20 are formed in one, and an open/close switch 16 changes (refer to drawing 2 ).

[0025] a principal piece 17 -- tabular -- accomplishing -- from a longitudinal direction -- seeing -- a cross direction -- \*\* -- the shape of a long rectangle is carried out and shown around hole 17a which penetrates a right-and-left both-sides side in the center section, and is prolonged in a cross direction is formed.

[0026] The tab section 18 is inserted in the above-mentioned tab insertion hole 6 which was set up from the front end section of a principal piece 17, and was formed in the internal case 3 from the bottom, and the upper bed section projects in the upper part from the top face of the internal case 3.

[0027] The engagement section 19 succeeds in the shape of a rod, and protrudes on a left from the soffit section of the tab section 18, and as the spring-peg section 20 projects in the soffit section of the front face of a principal piece 17, it is prepared ahead at it.

[0028] The advice section 21, the spring-peg section 22, and the stopper section 23 are formed in the interior of the internal case 3, respectively (refer to drawing 2 ).

[0029] The advice section 21 succeeds in tabular [ rectangular ], and is inserted in shown around hole 17a of the above-mentioned open/close switch 16. And the die length of the cross direction of the advice section 21 is formed shorter than that of shown around hole 17a, and an open/close switch 16 is supported by the cross direction free [ sliding ] to the advice section 21.

[0030] The spring-peg section 22 is located ahead of the open/close switch 16, and the extension spring 24 is stretched between the spring-peg section 22 and the spring-peg section 20 of an open/close switch 16. Therefore, the migration force to the front is energized by the extension spring 24 at an open/close switch 16, in the condition that the migration force to back is not applied to the open/close switch 16, the advice section 21 is in the location which approached the back end of shown around hole 17a of an open/close switch 16 so that this may mention later, and the tab section 18 of

an open/close switch 16 is located in the front end section of the tab insertion hole 6.

[0031] The stopper section 23 is located behind the open/close switch 16, and is formed in the longitudinal direction in the shape of [ long ] the triangle pole. Field 23a of one of the fields of the three shape of a rectangle of the stopper section 23 is formed as a cartridge plane of composition it turns [ plane of composition ] to the abbreviation front, and one arm of the above-mentioned torsion coil spring 12 is \*\*\*\*(ed) by this cartridge plane-of-composition 23a, and the arm of another side of the torsion coil spring 12 is \*\*\*\*(ed) by the inner surface of the inside lid 8. And among rectangle-like sides, others and field 23b of 1 are formed as a stopper side it turns [ side ] to abbreviation top slanting back, when the inside lid 8 rotates and is opened so that it may mention later to this stopper side 23b, contact side 10b of the support section 10 contacts, and thereby, the inside lid 8 is suspended in the state of disconnection.

[0032] Next, the switching action of the inside lid 8 and the outside lid 13 is explained (refer to drawing 3 thru/or drawing 9 ).

[0033] First, the condition that the inside lid 8 and the outside lid 13 were blockaded is explained (refer to drawing 3 ).

[0034] The front end edge is laid in receiving part 2a of the outline case 2, it is covered a level condition with the outside lid 13, and outside 8a of the inside lid 8 is pressed by the press projection 14 of the outside lid 13 from the upper part. Here, the spring force of the above-mentioned torsion coil spring 12 is made smaller than the thrust produced to the inside lid 8 with the self-weight of the outside lid 13. It is formed for a long time. and it described above -- as -- the die length of the shaft orientations of the press projection 14 -- the distance of receiving part 2a of the outline case 2, and the top face of the internal case 3 -- \*\* -- And since thickness of the inside lid 8 is made thinner than the distance of the top face of the internal case 3, and level difference section 5a, as for the inside lid 8, the front end edge is made into the condition of level difference section 5a of it being located up for a while and falling before \*\*. Moreover, the open/close switch 16 is made into the condition that are in the front end in a successive range, namely, the advice section 21 approached the back end of supported hole 17a.

[0035] In addition, although a state of obstruction is maintained by the self-weight, the outside lid 13 prepares a lock device in the part which not only this but the outline case 2 and the outside lid 13 contact, and you may make it keep above the state of obstruction of the outside lid 13 into it.

[0036] As mentioned above, where the inside lid 8 and the outside lid 13 are blockaded, the outside lid 13 is opened with hand control (refer to drawing 4 ).

[0037] If the outside lid 13 is opened, the press to the inside lid 8 with this outside lid 13 will be canceled, and, thereby, the inside lid 8 will rotate to the abbreviation upper part according to the spring force of the torsion coil spring 12. And stop section 9b of the stop pawl 9 and the engagement section 19 of an open/close switch 16 are engaged in the place which the inside lid 8 rotated to rather upper, namely, 9d of stop sides of stop section 9b contacts the underside of the engagement section 19, and the inside lid 8 stops in the level condition.

[0038] Next, in order to open and close the inside lid 8, the tab section 18 of an open/close switch 16 is operated, and this tab section 18 is moved to the back end side of the tab insertion hole 6 (refer to drawing 5 ).

[0039] Namely, if the spring force of the extension spring 24 stretched between the spring-peg section 22 and the spring-peg section 20 of an open/close switch 16 is resisted and the tab section 18 is moved to the back end side of the tab insertion hole 6, engagement on the engagement section 19 and the stop pawl 9 of the inside lid 8 is canceled, and the inside lid 8 is seen by drawing 5 according to the spring force of the torsion coil spring 12, and rotates in the direction of a clockwise rotation.

[0040] In addition, when moving the tab section 18 to the back end side of the tab insertion hole 6, an open/close switch 16 is guided at the advice section 21, and is moved back, and the advice section 21 located in the back end side of shown around hole 17a is located in the front end side of shown around hole 17a.

[0041] And the inside lid 8 rotates in the direction of a clockwise rotation further, and it is stopped in the place where contact side 10b of the support section 10 contacted stopper side 23b of the stopper section 23 (refer to drawing 6 ).

[0042] In addition, if the press to the back to the tab section 18 is canceled after engagement on the engagement section 19 and the stop pawl 9 is canceled Return and the tab section 18 of an open/close switch 16 are again located in the location where the open/close switch 16 was moved to the front by the spring force of an extension spring 24, and the back end side of shown around hole 17a of an open/close switch 16 was approached, the original condition 21, i.e., advice section, at the front end section of the tab insertion hole 6 (refer to drawing 6 ).

[0043] If the outside lid 13 is blockaded from the condition that the outside lid 13 and the inside lid 8 were opened as mentioned above, as shown below, the inside lid 8 is also blockaded simultaneously.

[0044] If the outside lid 13 is seen by drawing 7 and it rotates in the counter clockwise direction with hand control, the press projection 14 of the outside lid 13 will contact outside 8a of the inside lid 8 (refer to drawing 7 ).

[0045] If the outside lid 13 is furthermore rotated in the counter clockwise direction, the inside lid 8 is pressed by the press projection 14 of the outside lid 13, with the outside lid 13, will be seen by drawing 7 and will rotate in the counter clockwise direction. And as for the inside lid 8 which rotated in the counter clockwise direction, stop section 9b of the stop pawl 9 contacts the engagement section 19 of an open/close switch 16. That is, circular face 9c of stop section 9b

contacts the engagement section 19, if the inside lid 8 rotates by rotation of the outside lid 13 further, circular face 9c and the engagement section 19 will \*\*\*\*\*, and at this time, an open/close switch 16 resists the spring force of an extension spring 24, and is moved back slightly (refer to drawing 8 ).

[0046] In the place where the inside lid 8 furthermore rotated in the counter clockwise direction by rotation of the outside lid 13 at, and the slide contact in circular face 9c and the engagement section 19 was canceled, it is moved to the front by the spring force of an extension spring 24, and an open/close switch 16 returns to the original condition (refer to drawing 9 ). this time -- the inside lid 8 -- abbreviation -- it is in the level condition and is covered the condition of the riser before \*\* with the outside lid 13.

[0047] And since thickness of the inside lid 8 is made thinner than the distance of the top face of the internal case 3, and level difference section 5a as described above, as follows, the inside lid 8 is seen by drawing 9 by rotation of the outside lid 13, and it rotates further in the counter clockwise direction until the front end edge of the inside lid 8 will be in the condition of level difference section 5a of it being located up for a while and falling before \*\*.

[0048] If it rotates in the counter clockwise direction further from the condition of the riser before \*\*, the condition 13, i.e., the outside lid, of drawing 9 , the front-end edge will be in a level condition in contact with the above-mentioned receiving part 2a of the outline case 2, and this outside lid 13 will rotate the inside lid 8 pressed by the press projection 14 of the outside lid 13 in the counter clockwise direction until the front-end edge will be in the condition of level difference section 5a it is located up for a while and fall before \*\*. And since the spring force of the torsion coil spring 12 is made smaller than the thrust applied to the inside lid 8 with the self-weight of the outside lid 13 as described above, the above-mentioned condition, i.e., the condition that the outside lid 13 is level, and the condition that the inside lid 8 falls before \*\* are maintained, and this condition will be in the condition that both the outside lid 13 and the inside lid 8 were blockaded.

[0049] Thus, the thickness of the inside lid 8 is formed more thinly than the distance of the top face of the internal case 3, and level difference section 5a. When the outside lid 13 is blockaded, if it is made to be blockaded in the condition of level difference section 5a of it being located up for a while and falling before \*\*, in the front end edge, the inside lid 8 Even if a gap of some arises for the location precision of the outside lid 13 or the inside lid 8 with a dimensional tolerance etc. in the production process of playback and/or a recording device 1 As for the outside lid 13, the front end edge contacts receiving part 2b, and the front end section can be located in from the top face of the internal case 3 before level difference section 5a, and the inside lid 8 can always certainly blockade simultaneously the outside lid 13 and the inside lid 8.

[0050] Playback of the optical disk which is not illustrated is performed as follows.

[0051] First, from the condition (refer to drawing 3 ) that the outside lid 13 and the inside lid 8 were blockaded, the outside lid 13 is opened like the above (refer to drawing 4 ), and the inside lid 8 is opened continuously (refer to drawing 6 ). And in the state of this drawing 6 , opening of the upper part of the crevice 5 of the internal case 3 is carried out, and it equips with the optical disk which is not illustrated to the applied part prepared in this crevice 5.

[0052] After equipping with an optical disk, only the inside lid 8 is blockaded. In order to blockade the inside lid 8, it carries out by rotating manually, as twist the inside lid 8, the spring force of a coil spring 12 is resisted, it sees by drawing 6 and it is shown in the counter clockwise direction below.

[0053] If the inside lid 8 is rotated in the counter clockwise direction from the condition of drawing 6 , circular face 9c of the stop pawl 9 and the engagement section 19 \*\*\*\* like the case where the inside lid 8 is pressed by the press projection 14 of the outside lid 13, and rotates, and an open/close switch 16 will resist the spring force of an extension spring 24, and will be moved back slightly. In and the place where the inside lid 8 rotated further in the counter clockwise direction at, and the slide contact in circular face 9c of the stop pawl 9 and the engagement section 19 was canceled By an open/close switch's 16 being moved to the front by the spring force of an extension spring 24, and canceling the press from the upper part side by the hand control over the inside lid 8 in the original condition return and here, the stop pawl 9 and the engagement section 19 are engaged, and, thereby, the inside lid 8 is blockaded in the level condition (refer to drawing 4 ).

[0054] And in the condition that only the inside lid 8 was blockaded in this way, it succeeds in playback of the optical disk with which the applied part in a crevice 5 was equipped by operating the actuation tabs 4 and 4 formed in the top face of the internal case 3, and the tab for playback of ... Moreover, volume control, tone control, etc. concerning an optical disk are performed by operating the actuation tabs 4 and 4, each tabs 4 and 4 of ...., and ...

[0055] in addition, the condition that, as for playback of an optical disk, both the condition 8, i.e., an inside lid, that the inside lid 8 was blockaded, and the outside lid 13 were blockaded if it was in playback and/or a recording apparatus 1 -- or it will be carried out if it is not in the condition that the inside lid 8 was blockaded and the outside lid 13 was opened.

[0056] Even if the press projection 14 presses outside 8a of the inside lid 8, the outside lid 13 and the inside lid 8 are blockaded at once and it opens the outside lid 13 conversely when the press projection 14 is formed in the outside lid 13 and the outside lid 13 is blockaded, if it is in playback and/or a recording device 1 as described above, the inside lid

8 is not opened simultaneously with this outside lid 13.

[0057] Therefore, when the above-mentioned equipment 1 with which it succeeds in playback of an optical disk only where the inside lid 8 is blockaded as mentioned above is suited, namely, the outside lid 13 needs to be opened during playback of an optical disk (for example, when it is going to perform volume control and tone control), the nonconformity that the inside lid 8 will be opened simultaneously and playback will stop is not produced.

[0058] Fetch from the applied part of an optical disk is performed as follows.

[0059] Fetch of the optical disk from the condition (refer to drawing 3 ) that both the inside lid 8 and the outside lid 13 were blockaded opens the outside lid 13 first (refer to drawing 4 ), then opens the inside lid 8 (refer to drawing 6 ), and is performed by removing the optical disk which playback ended from an applied part.

[0060] Moreover, fetch of the optical disk from the condition (refer to drawing 4 ) that the inside lid 8 was blockaded and the outside lid 13 was opened opens the inside lid 8 (refer to drawing 6 ), and is performed by removing the optical disk which playback ended from an applied part.

[0061] Since the press projection 14 can press outside 8a of the inside lid 8 and can blockade the outside lid 13 and the inside lid 8 at once when the outside lid 13 is blockaded if a deer is carried out and it is in the above-mentioned playback and/or the above-mentioned recording device 1, after closing the activity 8 which closes a lid twice, i.e., an inside lid, it is not necessary to do the troublesome activity of closing the outside lid 13, and time and effort can be saved.

[0062] The manufacturing cost of playback and/or a recording device 1 seems moreover, not to establish other special devices, in order to make the outside lid 13 and the inside lid 8 blockade at once, and not to increase substantially, since the outside lid 13 and the inside lid 8 can be blockaded at once according to the easy structure of forming the press projection 14 in the inner surface of the outside lid 13.

[0063] In addition, although the case where the outside lid 13 and the inside lid 8 were blockaded at once when the press projection 14 is formed in the outside lid 13 and the inside lid 8 is pressed by this press projection 14 above was shown On the contrary, when the outside lid 13 rotates, and the inner surface of this outside lid 13 presses a pressed projection, the outside lid 13 and the inside lid 8 may be made to prepare a pressed projection in outside 8a of the inside lid 8, and to be blockaded at once. In this case, even if it is, the same effectiveness as the case where the press projection 14 is formed in the outside lid 13 is done so.

[0064] Moreover, as the inner surface of this outside lid 13 touches outside 8a of the inside lid 8, when the outside lid 13 rotates, and the outside lid 13 presses the inside lid 8 directly, the outside lid 13 and the inside lid 8 may be made to prepare a projection in neither the outside lid 13 nor the inside lid 8, but to be blockaded at once. In this case, even if it is, the same effectiveness as the case where the press projection 14 is formed in the outside lid 13 is done so.

[0065]

[Effect of the Invention] So that clearly from the place indicated above this invention duplex lid structure It is the duplex lid structure equipped with the outside lid which opens and closes an outline case, and the inside lid which open and close the crevice of the internal case arranged inside an outline case. Since the press section was formed in the outside lid, and the suppressed area pressed by the press section of this outside lid was formed when an outside lid was blockaded by the inside lid Since the press section can press the suppressed area of an inside lid and can blockade an outside lid and an inside lid at once when an outside lid is blockaded, it is not necessary to do the troublesome activity of closing a lid twice, and time and effort can be saved.

[0066] If it is in invention indicated to claim 2, since the press section of an outside lid is the inner surface of the press projection prepared in the inner surface of an outside lid, or an outside lid and it is the pressed projection to which the suppressed area of an inside lid was prepared in the outside surface of an inside lid, or the outside surface of an inside lid Since an outside lid and an inside lid can be blockaded at once in the inner surface of an outside lid according to the easy structure of preparing a pressed projection in the outside surface of a press projection or an inside lid, A manufacturing cost seems not to prepare other special devices in blockading an outside lid and an inside lid at once, and for this not to increase substantially.

[0067] If it is in invention indicated to claim 3 and claim 4 Since the lock out location of an inside lid when an inside lid is blockaded by press of an outside lid with this outside lid is a location which visited the inner base of the above-mentioned crevice rather than the lock out location of an inside lid when an outside lid is not blockaded but only an inside lid is blockaded Even if a gap of some arises for the location precision of an outside lid or an inside lid with a dimensional tolerance etc. in a production process, an outside lid and an inside lid can always certainly be blockaded simultaneously.

[0068] If it is in invention indicated to claim 5 thru/or claim 8 Since it applied to the playback and/or the recording device which can perform the playback and/or record over the above-mentioned record medium only when the applied part equipped with a record medium was prepared in a crevice and an inside lid was blockaded An inside lid is blockaded with an outside lid, when an outside lid is blockaded and the press section presses the suppressed area of an inside lid. On the contrary, since the press section does not press a suppressed area and an inside lid is not

simultaneously opened when an outside lid is opened, even when an outside lid is opened during playback of a record medium, and/or record, nonconformity which an inside lid is opened and playback and/or record stop is not produced. [0069] In addition, it passes over no the concrete configurations and structures of each part which were shown in the above-mentioned example to what showed a mere example of the somatization for carrying out this invention, and the technical range of this invention is not restrictively interpreted by these.

---

[Translation done.]

## TÉCHNICAL FIELD

---

[Field of the Invention] This invention relates to duplex lid structure. In detail, it is related with the technique which enables it to blockade an outside lid and an inside lid at once.

---

[Translation done.]

## PRIOR ART

---

[Description of the Prior Art] For example, there are the playback and/or the recording device with which the body section (internal case) of which the playback section, the loudspeaker section, etc. for performing playback concerning record media, such as an optical disk, are formed in one, and consist is called the so-called sound system arranged in an outline case.

[0003] If it is in such playback and/or a recording device, it has the inside lid for generally opening and closing the crevice which has the applied part equipped with the record medium which it was formed in the outside lid and internal case for opening and closing an outline case, and was described above inside.

---

[Translation done.]

## EFFECT OF THE INVENTION

---

[Effect of the Invention] So that clearly from the place indicated above this invention duplex lid structure It is the duplex lid structure equipped with the outside lid which opens and closes an outline case, and the inside lid which open and close the crevice of the internal case arranged inside an outline case. Since the press section was formed in the outside lid, and the suppressed area pressed by the press section of this outside lid was formed when an outside lid was blockaded by the inside lid Since the press section can press the suppressed area of an inside lid and can blockade an outside lid and an inside lid at once when an outside lid is blockaded, it is not necessary to do the troublesome activity of closing a lid twice, and time and effort can be saved.

[0066] If it is in invention indicated to claim 2, since the press section of an outside lid is the inner surface of the press projection prepared in the inner surface of an outside lid, or an outside lid and it is the pressed projection to which the suppressed area of an inside lid was prepared in the outside surface of an inside lid, or the outside surface of an inside lid Since an outside lid and an inside lid can be blockaded at once in the inner surface of an outside lid according to the easy structure of preparing a pressed projection in the outside surface of a press projection or an inside lid, A manufacturing cost seems not to prepare other special devices in blockading an outside lid and an inside lid at once, and for this not to increase substantially.

[0067] If it is in invention indicated to claim 3 and claim 4 Since the lock out location of an inside lid when an inside lid is blockaded by press of an outside lid with this outside lid is a location which visited the inner base of the above-mentioned crevice rather than the lock out location of an inside lid when an outside lid is not blockaded but only an inside lid is blockaded Even if a gap of some arises for the location precision of an outside lid or an inside lid with a dimensional tolerance etc. in a production process, an outside lid and an inside lid can always certainly be blockaded simultaneously.

[0068] If it is in invention indicated to claim 5 thru/or claim 8 Since it applied to the playback and/or the recording device which can perform the playback and/or record over the above-mentioned record medium only when the applied part equipped with a record medium was prepared in a crevice and an inside lid was blockaded An inside lid is blockaded with an outside lid, when an outside lid is blockaded and the press section presses the suppressed area of an inside lid. On the contrary, since the press section does not press a suppressed area and an inside lid is not simultaneously opened when an outside lid is opened, even when an outside lid is opened during playback of a record medium, and/or record, nonconformity which an inside lid is opened and playback and/or record stop is not produced.

[0069] In addition, it passes over no the concrete configurations and structures of each part which were shown in the above-mentioned example to what showed a mere example of the somatization for carrying out this invention, and the technical range of this invention is not restrictively interpreted by these.

---

[Translation done.]

## TECHNICAL PROBLEM

---

[Problem(s) to be Solved by the Invention] By the way, the outside lid could be opened at the time of disconnection of an inside lid and closed no longer, although an outside lid can be opened and closed at the time of lock out of an inside lid if it is in the conventional playback and/or a recording device equipped with an outside lid which was described above, and the inside lid.

[0005] If this blockades an outside lid where an inside lid is opened and playback and/or a recording device are left in the condition when it enables it to open and close an outside lid irrespective of closing motion of an inside lid It is for the dust and dust which were floating in the clearance between an internal case and an outside lid entering in a crevice, adhering to an applied part, causing trouble to the playback and/or record over a record medium, and avoiding this etc.

[0006] Therefore, in the conventional playback and/or a recording device, after closing an inside lid, an outside lid must be closed, the troublesome activity of it being very inconvenient and closing a lid twice must be done, and there is always a problem of taking time and effort.

[0007] Then, this invention duplex lid structure conquers the above-mentioned trouble, and makes it a technical problem to enable it to blockade an outside lid and an inside lid at once.

---

[Translation done.]

[Means for Solving the Problem] In order that this invention duplex lid structure may solve the above-mentioned technical problem, the press section is formed in an outside lid, and when an outside lid is blockaded by the inside lid, the suppressed area pressed by the press section of this outside lid is formed.

[0009] Therefore, if it is in this invention duplex lid structure, when an outside lid is blockaded, an inside lid is also blockaded simultaneously.

[0010]

[Embodiment of the Invention] Below, it explains according to an example of operation illustrating the gestalt of operation of this invention duplex lid structure.

[0011] In addition, the example shown below applies this invention duplex lid structure to the playback and/or the recording device which are the so-called sound system which has for example, a compact disk (CD) player.

[0012] Moreover, when a direction is shown in this description, it explains by making into the bottom the direction which goes caudad the direction which goes to the lower left in drawing 1 direction to upper right direction a front to upper left direction the back to the left and lower right direction to the right and the upper part a top.

[0013] Playback and/or a recording device 1 are equipped with the body section which the playback section, the loudspeaker section, etc. for performing the box-like outline case 2 which carried out opening and the internal case 3 arranged to the interior, i.e., the playback concerning an optical disk (compact disk), are formed in the upper part in one, and changes (refer to drawing 1 ).

[0014] Level difference section 2a is formed in the opening edge by the side of before the outline case 2, and when the outside lid mentioned later is closed, let this level difference section 2a be the receiving part which receives the front end edge.

[0015] It is for applying to the method of the right from the center section on the top face of the internal case 3, and two or more actuation tabs 4 and 4 and ... being arranged, and performing various kinds of adjustments, such as these actuation tabs 4 and 4, the playback which ... requires for an optical disk and its halt or volume control, and tone control, etc.

[0016] The crevice 5 which carries out opening is formed in the upper part at the part on the left-hand side of the top face of the internal case 3, and the applied part which is equipped with an optical disk and which is not illustrated is prepared in the interior of this crevice 5. And level difference section 5a is formed in the opening edge by the side of before a crevice 5.

[0017] And the tab insertion hole 6 of the shape of a long rectangle is formed in the cross direction located near the front end section of the opening edge on the right-hand side of a crevice 5 at the internal case 3. Moreover, the long insertion hole 7 is formed in the cross direction at the right side edge section of the top face of the internal case 3.

[0018] The inside lid 8 succeeds in tabular [ of an abbreviation rectangle ], the thickness T is made thinner than the distance H1 between the top face of the internal case 3 shown in drawing 3 , and level difference section 5a, and the end section is supported by the upper bed section free [ rotation ] in the back end section of the right-and-left both-sides wall of the above-mentioned crevice 5. And the stop pawl 9 is installed in the right edge in the location of the other end approach of the inner surface of the inside lid 8 (refer to drawing 2 ).

[0019] Stop section 9b which projected in the up Norikazu edge side of the inside lid 8 from the point of this, lobe 9a which projected perpendicularly, and this lobe 9a is formed in one from the inner surface of the inside lid 8, and the stop pawl 9 changes. And stop section 9b is equipped with 9d of stop sides parallel to the inner surface of the inside lid 8 succeeding circular face 9c and this circular face 9c approaching the inner surface of the inside lid 8 as it goes at a head.

[0020] The tabular support sections 10 and 10 are installed from the end section of the right-and-left edges on both sides of the inner surface of the inside lid 8 (only one thing is shown in drawing 2 ). The first portion of the field the thing 10 located in right-hand side among these support sections 10 and 10 turns [ field ] to the thickness direction and the direction which intersects perpendicularly is set to circular face 10a. It is formed as a contact side displaced upwards as it goes back in the condition, i.e., a level condition, that field 10b of the section succeeded in the shape of an approximate plane the second half in which this circular face 10a is followed, and the inside lid 8 was blockaded.

[0021] The support sections 10 and 10 are supported free [ rotation ] in the location of the ends approach of the rotation shaft 11 with which both ends were fixed to the side attachment wall of a crevice 5. The right-hand side support section 10 immediately and inside it twists, and a coil spring 12 sees by drawing 3 thru/or drawing 9 on the inside lid 8 with the torsion coil spring 12 by being inserted between the inner surfaces of the inside lid 8 and the stopper sections mentioned later in which the coil section was supported by the rotation shaft 11 in the shape of outer fitting, and the rotation force to the direction of a clockwise rotation is energized.

[0022] The outside lid 13 succeeds in tabular [ of \*\*\*\*\* of a long rectangle ] to a longitudinal direction, the end

section in the cross direction is supported by the upper bed section free [ rotation ] in the back end section of the outline case 2, and the press projection 14 is installed from the center of abbreviation of the left half part of an inner surface (refer to drawing 2 ). and the distance H2 between receiving part 2a of the outline case 2 and the top faces of the internal case 3 which show die-length L of the shaft orientations of the press projection 14 to drawing 3 -- \*\* -- it lengthens and the point is formed in the shape of an abbreviation semi-sphere.

[0023] The end section of a bearing bar 15 is supported by the right side edge of the outside lid 13 free [ rotation ]. And a bearing bar 15 is inserted in in the above-mentioned insertion hole 7 formed in the right side edge section of the internal case 3, and the other end is supported free [ migration ] inside the internal case 3.

[0024] A principal piece 17, the tab section 18, the engagement section 19, and the spring-peg section 20 are formed in one, and an open/close switch 16 changes (refer to drawing 2 ).

[0025] a principal piece 17 -- tabular -- accomplishing -- from a longitudinal direction -- seeing -- a cross direction -- \*\* -- the shape of a long rectangle is carried out and shown around hole 17a which penetrates a right-and-left both-sides side in the center section, and is prolonged in a cross direction is formed.

[0026] The tab section 18 is inserted in the above-mentioned tab insertion hole 6 which was set up from the front end section of a principal piece 17, and was formed in the internal case 3 from the bottom, and the upper bed section projects in the upper part from the top face of the internal case 3.

[0027] The engagement section 19 succeeds in the shape of a rod, and protrudes on a left from the soffit section of the tab section 18, and as the spring-peg section 20 projects in the soffit section of the front face of a principal piece 17, it is prepared ahead at it.

[0028] The advice section 21, the spring-peg section 22, and the stopper section 23 are formed in the interior of the internal case 3, respectively (refer to drawing 2 ).

[0029] The advice section 21 succeeds in tabular [ rectangular ], and is inserted in shown around hole 17a of the above-mentioned open/close switch 16. And the die length of the cross direction of the advice section 21 is formed shorter than that of shown around hole 17a, and an open/close switch 16 is supported by the cross direction free [ sliding ] to the advice section 21.

[0030] The spring-peg section 22 is located ahead of the open/close switch 16, and the extension spring 24 is stretched between the spring-peg section 22 and the spring-peg section 20 of an open/close switch 16. Therefore, the migration force to the front is energized by the extension spring 24 at an open/close switch 16, in the condition that the migration force to back is not applied to the open/close switch 16, the advicc section 21 is in the location which approached the back end of shown around hole 17a of an open/close switch 16 so that this may mention later, and the tab section 18 of an open/close switch 16 is located in the front end section of the tab insertion hole 6.

[0031] The stopper section 23 is located behind the open/close switch 16, and is formed in the longitudinal direction in the shape of [ long ] the triangle pole. Field 23a of one of the fields of the three shape of a rectangle of the stopper section 23 is formed as a cartridge plane of composition it turns [ plane of composition ] to the abbreviation front, and one arm of the above-mentioned torsion coil spring 12 is \*\*\*\*(ed) by this cartridge plane-of-composition 23a, and the arm of another side of the torsion coil spring 12 is \*\*\*\*(ed) by the inner surface of the inside lid 8. And among rectangle-like sides, others and field 23b of 1 are formed as a stopper side it turns [ side ] to abbreviation top slanting back, when the inside lid 8 rotates and is opened so that it may mention later to this stopper side 23b, contact side 10b of the support section 10 contacts, and thereby, the inside lid 8 is suspended in the state of disconnection.

[0032] Next, the switching action of the inside lid 8 and the outside lid 13 is explained (refer to drawing 3 thru/or drawing 9 ).

[0033] First, the condition that the inside lid 8 and the outside lid 13 were blockaded is explained (refer to drawing 3 ).

[0034] The front end edge is laid in receiving part 2a of the outline case 2, it is covered a level condition with the outside lid 13, and outside 8a of the inside lid 8 is pressed by the press projection 14 of the outside lid 13 from the upper part. Here, the spring force of the above-mentioned torsion coil spring 12 is made smaller than the thrust produced to the inside lid 8 with the self-weight of the outside lid 13. It is formed for a long time. and it described above -- as -- the die length of the shaft orientations of the press projection 14 -- the distance of receiving part 2a of the outline case 2, and the top face of the internal case 3 -- \*\* -- And since thickness of the inside lid 8 is made thinner than the distance of the top face of the internal case 3, and level difference section 5a, as for the inside lid 8, the front end edge is made into the condition of level difference section 5a of it being located up for a while and falling before \*\*. Moreover, the open/close switch 16 is made into the condition that are in the front end in a successive range, namely, the advice section 21 approached the back end of supported hole 17a.

[0035] In addition, although a state of obstruction is maintained by the self-weight, the outside lid 13 prepares a lock device in the part which not only this but the outline case 2 and the outside lid 13 contact, and you may make it keep above the state of obstruction of the outside lid 13 into it.

[0036] As mentioned above, where the inside lid 8 and the outside lid 13 are blockaded, the outside lid 13 is opened with hand control (refer to drawing 4 ).

[0037] If the outside lid 13 is opened, the press to the inside lid 8 with this outside lid 13 will be canceled, and, thereby, the inside lid 8 will rotate to the abbreviation upper part according to the spring force of the torsion coil spring 12. And stop section 9b of the stop pawl 9 and the engagement section 19 of an open/close switch 16 are engaged in the place which the inside lid 8 rotated to rather upper, namely, 9d of stop sides of stop section 9b contacts the underside of the engagement section 19, and the inside lid 8 stops in the level condition.

[0038] Next, in order to open and close the inside lid 8, the tab section 18 of an open/close switch 16 is operated, and this tab section 18 is moved to the back end side of the tab insertion hole 6 (refer to drawing 5 ).

[0039] Namely, if the spring force of the extension spring 24 stretched between the spring-peg section 22 and the spring-peg section 20 of an open/close switch 16 is resisted and the tab section 18 is moved to the back end side of the tab insertion hole 6, engagement on the engagement section 19 and the stop pawl 9 of the inside lid 8 is canceled, and the inside lid 8 is seen by drawing 5 according to the spring force of the torsion coil spring 12, and rotates in the direction of a clockwise rotation.

[0040] In addition, when moving the tab section 18 to the back end side of the tab insertion hole 6, an open/close switch 16 is guided at the advice section 21, and is moved back, and the advice section 21 located in the back end side of shown around hole 17a is located in the front end side of shown around hole 17a.

[0041] And the inside lid 8 rotates in the direction of a clockwise rotation further, and it is stopped in the place where contact side 10b of the support section 10 contacted stopper side 23b of the stopper section 23 (refer to drawing 6 ).

[0042] In addition, if the press to the back to the tab section 18 is canceled after engagement on the engagement section 19 and the stop pawl 9 is canceled Return and the tab section 18 of an open/close switch 16 are again located in the location where the open/close switch 16 was moved to the front by the spring force of an extension spring 24, and the back end side of shown around hole 17a of an open/close switch 16 was approached, the original condition 21, i.e., advice section, at the front end section of the tab insertion hole 6 (refer to drawing 6 ).

[0043] If the outside lid 13 is blockaded from the condition that the outside lid 13 and the inside lid 8 were opened as mentioned above, as shown below, the inside lid 8 is also blockaded simultaneously.

[0044] If the outside lid 13 is seen by drawing 7 and it rotates in the counter clockwise direction with hand control, the press projection 14 of the outside lid 13 will contact outside 8a of the inside lid 8 (refer to drawing 7 ).

[0045] If the outside lid 13 is furthermore rotated in the counter clockwise direction, the inside lid 8 is pressed by the press projection 14 of the outside lid 13, with the outside lid 13, will be seen by drawing 7 and will rotate in the counter clockwise direction. And as for the inside lid 8 which rotated in the counter clockwise direction, stop section 9b of the stop pawl 9 contacts the engagement section 19 of an open/close switch 16. That is, circular face 9c of stop section 9b contacts the engagement section 19, if the inside lid 8 rotates by rotation of the outside lid 13 further, circular face 9c and the engagement section 19 will \*\*\*\*, and at this time, an open/close switch 16 resists the spring force of an extension spring 24, and is moved back slightly (refer to drawing 8 ).

[0046] In the place where the inside lid 8 furthermore rotated in the counter clockwise direction by rotation of the outside lid 13 at, and the slide contact in circular face 9c and the engagement section 19 was canceled, it is moved to the front by the spring force of an extension spring 24, and an open/close switch 16 returns to the original condition (refer to drawing 9 ). this time -- the inside lid 8 -- abbreviation -- it is in the level condition and is covered the condition of the riser before \*\* with the outside lid 13.

[0047] And since thickness of the inside lid 8 is made thinner than the distance of the top face of the internal case 3, and level difference section 5a as described above, as follows, the inside lid 8 is seen by drawing 9 by rotation of the outside lid 13, and it rotates further in the counter clockwise direction until the front end edge of the inside lid 8 will be in the condition of level difference section 5a of it being located up for a while and falling before \*\*.

[0048] If it rotates in the counter clockwise direction further from the condition of the riser before \*\*, the condition 13, i.e., the outside lid, of drawing 9 , the front-end edge will be in a level condition in contact with the above-mentioned receiving part 2a of the outline case 2, and this outside lid 13 will rotate the inside lid 8 pressed by the press projection 14 of the outside lid 13 in the counter clockwise direction until the front-end edge will be in the condition of level difference section 5a it is located up for a while and fall before \*\*. And since the spring force of the torsion coil spring 12 is made smaller than the thrust applied to the inside lid 8 with the self-weight of the outside lid 13 as described above, the above-mentioned condition, i.e., the condition that the outside lid 13 is level, and the condition that the inside lid 8 falls before \*\* are maintained, and this condition will be in the condition that both the outside lid 13 and the inside lid 8 were blockaded.

[0049] Thus, the thickness of the inside lid 8 is formed more thinly than the distance of the top face of the internal case 3, and level difference section 5a. When the outside lid 13 is blockaded, if it is made to be blockaded in the condition of level difference section 5a of it being located up for a while and falling before \*\*, in the front end edge, the inside lid 8 Even if a gap of some arises for the location precision of the outside lid 13 or the inside lid 8 with a dimensional tolerance etc. in the production process of playback and/or a recording device 1 As for the outside lid 13, the front end edge contacts receiving part 2b, and the front end section can be located in from the top face of the internal case 3

before level difference section 5a, and the inside lid 8 can always certainly blockade simultaneously the outside lid 13 and the inside lid 8.

[0050] Playback of the optical disk which is not illustrated is performed as follows.

[0051] First, from the condition (refer to drawing 3 ) that the outside lid 13 and the inside lid 8 were blockaded, the outside lid 13 is opened like the above (refer to drawing 4 ), and the inside lid 8 is opened continuously (refer to drawing 6 ). And in the state of this drawing 6 , opening of the upper part of the crevice 5 of the internal case 3 is carried out, and it equips with the optical disk which is not illustrated to the applied part prepared in this crevice 5.

[0052] After equipping with an optical disk, only the inside lid 8 is blockaded. In order to blockade the inside lid 8, it carries out by rotating manually, as twist the inside lid 8, the spring force of a coil spring 12 is resisted, it sees by drawing 6 and it is shown in the counter clockwise direction below.

[0053] If the inside lid 8 is rotated in the counter clockwise direction from the condition of drawing 6 , circular face 9c of the stop pawl 9 and the engagement section 19 \*\*\*\* like the case where the inside lid 8 is pressed by the press projection 14 of the outside lid 13, and rotates, and an open/close switch 16 will resist the spring force of an extension spring 24, and will be moved back slightly. In and the place where the inside lid 8 rotated further in the counter clockwise direction at, and the slide contact in circular face 9c of the stop pawl 9 and the engagement section 19 was canceled By an open/close switch's 16 being moved to the front by the spring force of an extension spring 24, and canceling the press from the upper part side by the hand control over the inside lid 8 in the original condition return and here, the stop pawl 9 and the engagement section 19 are engaged, and, thereby, the inside lid 8 is blockaded in the level condition (refer to drawing 4 ).

[0054] And in the condition that only the inside lid 8 was blockaded in this way, it succeeds in playback of the optical disk with which the applied part in a crevice 5 was equipped by operating the actuation tabs 4 and 4 formed in the top face of the internal case 3, and the tab for playback of ... Moreover, volume control, tone control, etc. concerning an optical disk are performed by operating the actuation tabs 4 and 4, each tabs 4 and 4 of ..., and ...

[0055] in addition, the condition that, as for playback of an optical disk, both the condition 8, i.e., an inside lid, that the inside lid 8 was blockaded, and the outside lid 13 were blockaded if it was in playback and/or a recording apparatus 1 -- or it will be carried out if it is not in the condition that the inside lid 8 was blockaded and the outside lid 13 was opened.

[0056] Even if the press projection 14 presses outside 8a of the inside lid 8, the outside lid 13 and the inside lid 8 are blockaded at once and it opens the outside lid 13 conversely when the press projection 14 is formed in the outside lid 13 and the outside lid 13 is blockaded, if it is in playback and/or a recording device 1 as described above, the inside lid 8 is not opened simultaneously with this outside lid 13.

[0057] Therefore, when the above-mentioned equipment 1 with which it succeeds in playback of an optical disk only where the inside lid 8 is blockaded as mentioned above is suited, namely, the outside lid 13 needs to be opened during playback of an optical disk (for example, when it is going to perform volume control and tone control), the nonconformity that the inside lid 8 will be opened simultaneously and playback will stop is not produced.

[0058] Fetch from the applied part of an optical disk is performed as follows.

[0059] Fetch of the optical disk from the condition (refer to drawing 3 ) that both the inside lid 8 and the outside lid 13 were blockaded opens the outside lid 13 first (refer to drawing 4 ), then opens the inside lid 8 (refer to drawing 6 ), and is performed by removing the optical disk which playback ended from an applied part.

[0060] Moreover, fetch of the optical disk from the condition (refer to drawing 4 ) that the inside lid 8 was blockaded and the outside lid 13 was opened opens the inside lid 8 (refer to drawing 6 ), and is performed by removing the optical disk which playback ended from an applied part.

[0061] Since the press projection 14 can press outside 8a of the inside lid 8 and can blockade the outside lid 13 and the inside lid 8 at once when the outside lid 13 is blockaded if a deer is carried out and it is in the above-mentioned playback and/or the above-mentioned recording device 1, after closing the activity 8 which closes a lid twice, i.e., an inside lid, it is not necessary to do the troublesome activity of closing the outside lid 13, and time and effort can be saved.

[0062] The manufacturing cost of playback and/or a recording device 1 seems moreover, not to establish other special devices, in order to make the outside lid 13 and the inside lid 8 blockade at once, and not to increase substantially, since the outside lid 13 and the inside lid 8 can be blockaded at once according to the easy structure of forming the press projection 14 in the inner surface of the outside lid 13.

[0063] In addition, although the case where the outside lid 13 and the inside lid 8 were blockaded at once when the press projection 14 is formed in the outside lid 13 and the inside lid 8 is pressed by this press projection 14 above was shown On the contrary, when the outside lid 13 rotates, and the inner surface of this outside lid 13 presses a pressed projection, the outside lid 13 and the inside lid 8 may be made to prepare a pressed projection in outside 8a of the inside lid 8, and to be blockaded at once. In this case, even if it is, the same effectiveness as the case where the press projection 14 is formed in the outside lid 13 is done so.

[0064] Moreover, as the inner surface of this outside lid 13 touches outside 8a of the inside lid 8, when the outside lid 13 rotates, and the outside lid 13 presses the inside lid 8 directly, the outside lid 13 and the inside lid 8 may be made to prepare a projection in neither the outside lid 13 nor the inside lid 8, but to be blockaded at once. In this case, even if it is, the same effectiveness as the case where the press projection 14 is formed in the outside lid 13 is done so.

---

[Translation done.]

## DESCRIPTION OF DRAWINGS

---

### [Brief Description of the Drawings]

[Drawing\_1] A drawing shows an example of the operation which applied this invention duplex lid structure to playback and/or a recording device, and these Figs. are playback and/or an outline perspective view of a recording device.

[Drawing\_2] It is the amplification perspective view of an important section.

[Drawing\_3] It is the side elevation in which making the switching action of an outside lid and an inside lid into a cross section, and showing a part with drawing\_4 thru/or drawing\_9 , and this Fig. is drawing showing the condition that the outside lid and the inside lid were blockaded.

[Drawing\_4] It is drawing showing the condition that only the outside lid was opened.

[Drawing\_5] It is drawing showing the condition immediately after opening an inside lid following drawing\_4 .

[Drawing\_6] It is drawing showing the condition that the inside lid was opened following drawing\_5 .

[Drawing\_7] It is drawing showing the condition immediately after blockading an inside lid with an outside lid.

[Drawing\_8] It is drawing showing the condition of following drawing\_7 .

[Drawing\_9] It is drawing showing the condition of following drawing\_8 .

### [Description of Notations]

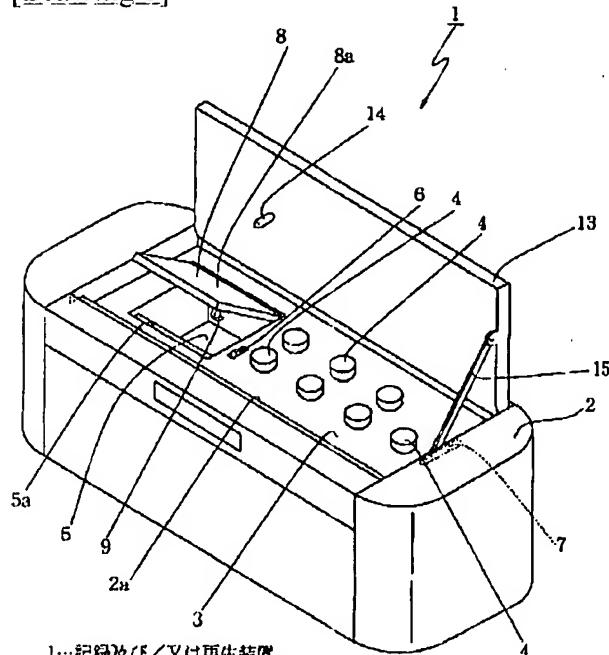
1 | -- A crevice, 8 / -- An inside lid, 8a / -- An outside surface (suppressed area) 13 / -- An outside lid, 14 / -- Press projection (press section) ] -- Playback and/or a recording device, 2 -- An outline case, 3 -- An internal case, 5

---

[Translation done.]

# DRAWINGS

## [Drawing 1]



1…記録及び／又は再生装置

2…外郭筐体

3…内部筐体

5…凹部

8…内側蓋

8a…外面（被押圧部）

13…外側蓋

14…押圧突起（押圧部）

## [Drawing 2]

2…外郭筐体

3…内部筐体

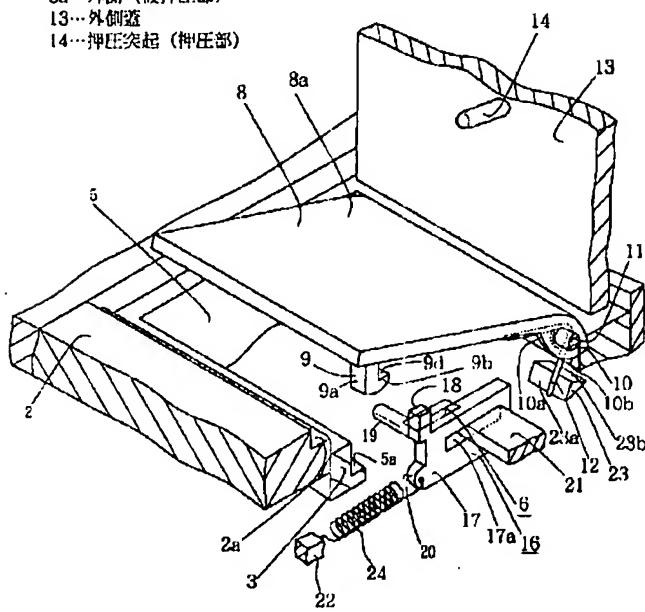
5…凹部

8…内側蓋

8a…外面（被押圧部）

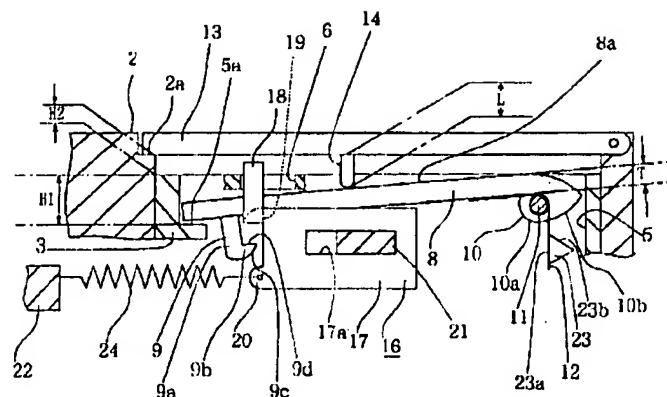
13…外側蓋

14…押圧突起（押圧部）



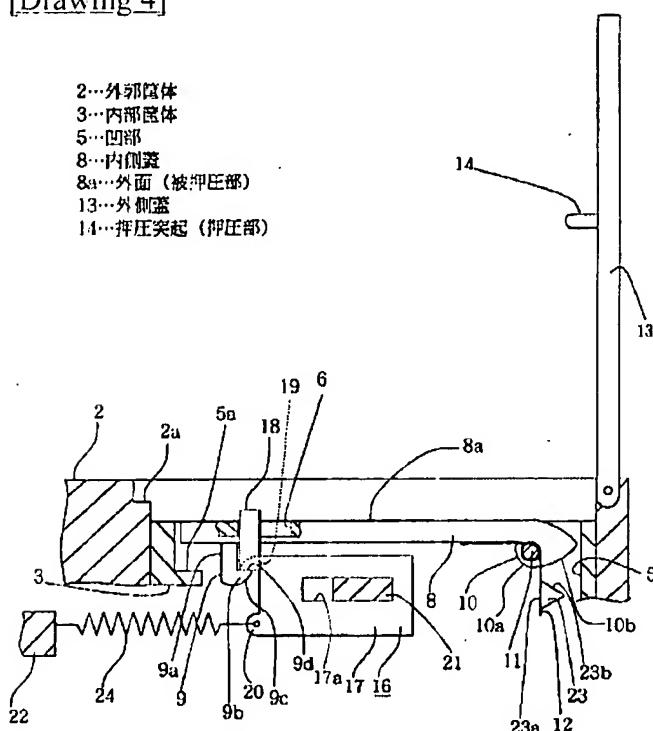
## [Drawing 3]

2…外卵管体  
 3…内部筐体  
 5…凹部  
 8…内侧盖  
 8a…外面（被押压部）  
 13…外侧盖  
 14…押压突起（押压部）

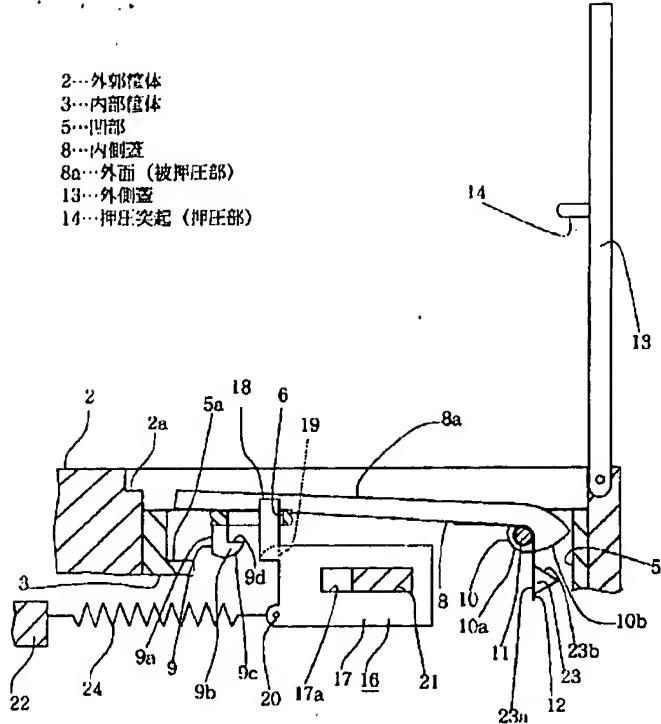


[Drawing 4]

2…外卵管体  
 3…内部筐体  
 5…凹部  
 8…内侧盖  
 8a…外面（被押压部）  
 13…外侧盖  
 14…押压突起（押压部）

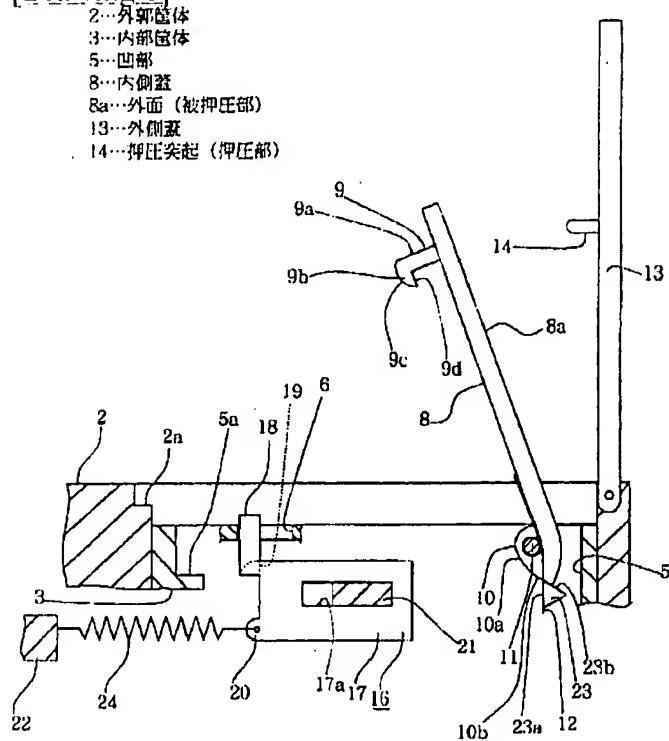


[Drawing 5]



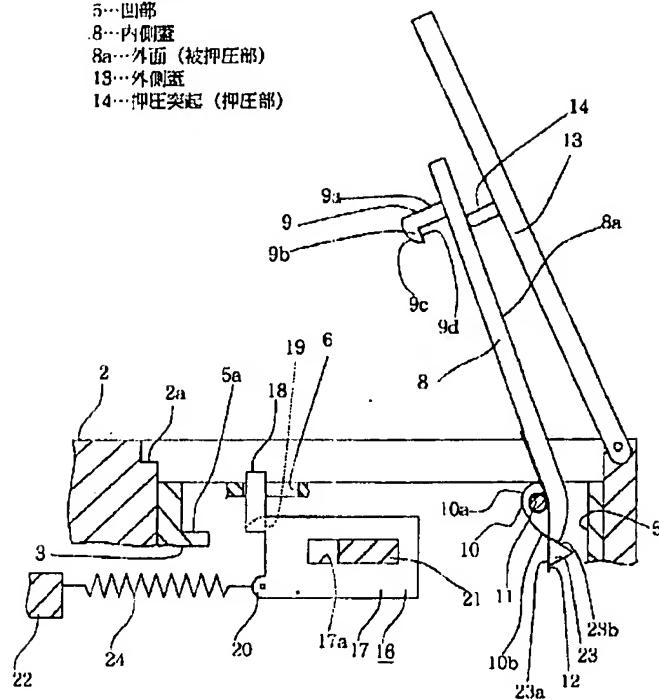
[Drawing 6]

2…外郭筐体  
3…内部筐体  
5…凹部  
8…内侧蓋  
8a…外面 (被押圧部)  
13…外側蓋  
14…押圧突起 (押圧部)



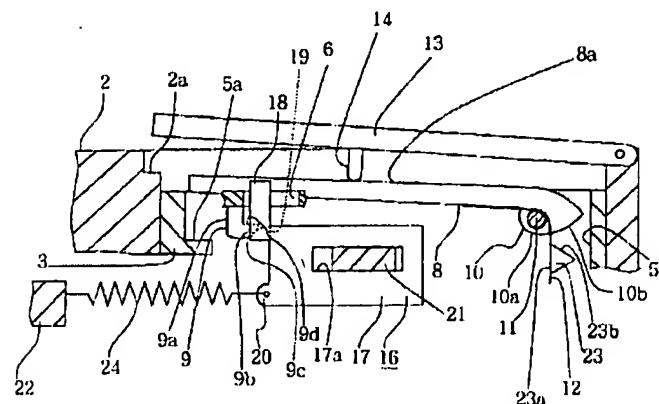
[Drawing 7]

2…外部筐体  
 3…内部筐体  
 5…凹部  
 8…内側蓋  
 8a…外面（被押圧部）  
 13…外側蓋  
 14…押圧突起（押圧部）



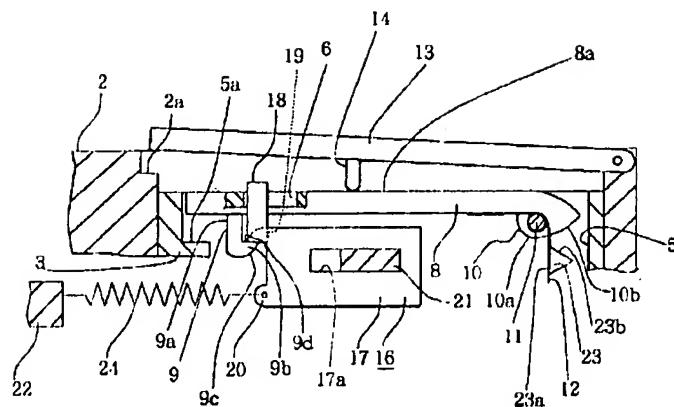
[Drawing 8]

2…外部筐体  
 3…内部筐体  
 5…凹部  
 8…内側蓋  
 8a…外面（被押圧部）  
 13…外側蓋  
 14…押圧突起（押圧部）



[Drawing 9]

2…外部筐体  
3…内部筐体  
5…凹部  
8…内侧盖  
8a…外侧（被挤压部）  
13…外侧盖  
14…挤压突起（挤压部）



[Translation done.]